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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

DEES, NIKKI H

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

03/19/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/509,835	Applicant(s) DE MEUTER ET AL.	
	Examiner Nikki H. Dees	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5,6 and 9-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,6 and 9-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Amendment filed November 25, 2008, has been entered. Claims 1, 2, 5, 6, and 9-16 are currently pending in the Application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, and 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boursier (4,840,797) in view of Devos et al. (4,849,023) and Ribadeau-Dumas et al. (5,470,591).
4. Boursier teaches a maltitol syrup that is used for a sugarless hard coating for comestibles of both a confectionary and pharmaceutical nature (col. 1 lines 7-9, lines 41-42). Boursier goes on to give an example of a composition of a maltitol syrup used for this coating (col. 2 lines 53-57). Boursier also speaks to the maltitol syrup as having a concentration of dry matter from 50-70%. However, Boursier's example lists only DP 1-DP 3 components and not DP4.

5. Boursier teaches their product has having a smooth and regular surface (col. 3 lines 13-15). One of ordinary skill would understand a “smooth and regular surface” to also be a “homogeneous surface” as is claimed.

6. Bouriser teaches their product being coated 15-30 times, depending on the thickness of coating desired (col. 3 lines 1-3).

7. Devos et al. teach a maltitol syrup containing DP 4+ products, including maltotetraitol (col. 4 lines 18-27). The syrup product of Devos et al. also has a dry matter content of greater than 65% (col. 4 line 43).

sent, both in the cane and in the sugar.

The sweetening power of the product obtained according to the invention is on the other hand high, close to that of saccharose.

Its moistening power and its moisture-retaining properties are very advantageous in certain confectionery products as well as in dentifrices and jellies.

It is moreover stable to heat, not causing reactions of caramelization or of browning by heating in the presence of proteins.

(column 5, lines 36+)

8. Ribadeau-Dumas et al. speak to the difficulty of crystallizing syrups containing high levels of maltitol (col. 2 lines 57-67). They add high MW oligosaccharides (DP4+) in order to control the crystallization of the maltitol in the syrup, resulting in the desired texture and stability (col. 4 lines 31-67).

9. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have substituted the maltitol syrup taught by Devos et al. for the maltitol syrup taught by Boursier for use in hard-coating of comestibles as the product has saccharose sweetening power, is useful in confections, and is heat stable. Further, as evidenced by Ribadeau-Dumas et al., the presence of DP4+ oligosaccharides would be expected to improve the coating abilities of the syrup as taught by Boursier et al.

10. One of ordinary skill in the art at the time the invention was made would have recognized that there were a number of maltitol syrups of different formulations available for use as coating syrups. The adjustment of the percentages of components having different degrees of polymerization in order to alter the characteristics of the syrup would not have required undue experimentation on the part of the artisan. Further, the artisan would have had a reasonable expectation that the presence of components having DP4+ would have improved the crystallization of the maltitol, thus providing the comestibles with a smooth, regular surface.

11. Claims 5, 6, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corriveau et al. (6,558,722) in view of Devos et al. (4,849,023).

12. Corriveau et al. speak directly to Applicants' claimed process for preparing sugar-free hard-coated comestibles. Corriveau et al. (col. 3 lines 22-23) list sugarless grossing syrups including maltitol. Further, it is noted that "greatest success is achieved when the compositions of the grossing syrup and the dry charge are compatible" (col. 3 lines 24-26). This would lead one of ordinary skill in the art to select a maltitol powder to coat the comestibles along with the previously selected maltitol grossing syrup.

13. Corriveau et al. place their centers (or cores) on a revolving pan (col. 3 line 40) during the coating process. This reads on Applicants' claim that the cores are in a moving bed of a coating apparatus.

14. Corriveau et al. disclose conditions for drying coated cores preferably at or below a of temperature 59°F (or 15°C) and a relative humidity of less than 50% (col. 4 lines

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31-33). These conditions are not unlike the conditions Applicants' claim for drying of their coated cores.

15. Regarding claims 15 and 16, Corriveau et al. teach their composition for the coating of edible, chewable, or pharmaceutical cores (col. 1 lines 40-41). One of ordinary skill would understand that cores of chocolate or nuts are edible cores. One of ordinary skill would also have been familiar with the coating of nuts and chocolates, as is commonly found in the art, and have found chocolate or nuts obvious choices to be coated with a coating syrup as claimed.

16. The only matter of the Applicants' claims 5 and 6 on which Corriveau et al. are silent is the composition of the maltitol syrup in regards to DP.

17. As discussed above, Devos et al. teach a maltitol syrup containing DP 4+ products, including maltotetraitol (col. 4 lines 18-27). The syrup product of Devos et al. also has a dry matter content of greater than 65% (col. 4 line 43).

18. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used the maltitol syrup having the composition disclosed by Devos et al. (col. 4 lines 18-27, 43) for the coating of the confections under the conditions disclosed by Corriveau et al. The use of coating syrups is well-known in the art, and undue experimentation would not have been required to utilize a maltitol syrup having a high dry-matter content in the invention of Corriveau et al.

Response to Arguments

19. Applicant's arguments filed November 25, 2008, have been fully considered but they are not persuasive.

20. Applicants argue that Boursier reference teaches away from the claimed range of dry matter in the syrup (Remarks, p. 7).

21. In response, Table IV of Boursier teaches a syrup having a richness of 97% maltitol and a dry matter content of 70%. This is not only within applicant's claimed range of 68-72%, but touches applicant's preferred range from 70-72%. Further, Boursier claims the syrup with a dry matter ranging from 50 to 70% (claim 1).

22. Applicants further argue that Bouriser does not teach the syrup having the DP4+ content as claimed (Remarks, p. 7).

23. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

24. At the time the invention was made, maltitol syrups containing 68-72 % dry matter were known, as evidence by Boursier. Maltitol syrups containing small amounts of DP4+ fractions were known, as evidenced by Devos et al. And the improvement in crystallization of maltitol by the presence of DP4+ components was also known, as evidenced by Ribadeau-Dumas et al. One of ordinary skill would have had the ability to

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combine these teachings to result in a maltitol syrup suitable for coating comestibles having a dry matter content of 68-72 % and a DP₄₊ fraction of 0.7 to 1.5 wt %.

25. Applicant argues that Devos is inconsistent with Boursier (Remarks, p. 9).

26. As Applicant has not provided any support for this statement, it is unclear where these inconsistencies occur.

27. Applicant argues that Ribadeau-Dumas et al. teach a higher concentration of DP₄₊ than is claimed (Remarks, p. 11).

28. Ribadeau-Dumas et al. was used in the rejection to show that at the time the invention was made the problem of crystallization in high maltitol syrups was known, as was the improvement of the crystallization by the addition of DP₄₊ (high MW) components. The determination of the appropriate amount of high MW component to add to improve the crystallization would have been within the abilities of one of ordinary skill in the art with no more than routine experimentation.

29. Applicant argues that Ribadeau-Dumas teaches a higher range of DP₃₊ components than claimed for Applicant's invention (Remarks, p. 12).

30. The Examiner has not relied on Ribadeau-Dumas for teaching the DP₃₊ concentration. The example composition of Bouriser at col. 2 line 57 having a maltotriitol at 1.8% by weight is considered to render Applicant's claims to a DP₃ concentration ranging from 0-1.5% by weight obvious. The difference of 0.3 wt % higher than claimed where a range covering 1.5 wt % is claimed would not be expected to result in a patentably distinct coating composition.

31. Applicant requests (Remarks, p. 13) that the Examiner provides an affidavit.

32. Applicant's basis for the request of an affidavit is not understood because personal opinion is not used in the rejection. The Ribadeau-Dumas reference explicitly teaches the use of high MW maltitol syrups to control crystallization. While Ribadeau-Dumas teaches a higher concentration than the claimed concentration, the reference is only relied upon for the teaching of the DP4 maltitol. The specific amount that is used is a result-effective variable depending on the degree of crystallization aiming to be controlled and the type of product that is it used in. Such a parameter can readily be determined by one skilled in the art through routine experimentation. Ribadeau-Dumas teaches that at low concentration, the DP4 retards crystallization. Thus, it would have been obvious to use low concentration when one wants to retard the crystallization instead of inhibiting it.

33. Regarding the rejections of claims 5-6, applicant repeats the argument that the examiner is using hindsight to combine the references (Remarks, p. 13).

34. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

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35. The knowledge of coating of comestibles with maltitol syrup as claimed by Applicant's was known in the art before Applicant's invention, as taught by Corriveau. A maltitol syrup containing between 0.7 and 1.5 wt % DP₄₊ fraction was also known before Applicant's invention, as taught by Devos. One of ordinary skill could have utilized the syrup as taught by Devos in the coating process as taught by Corriveau with the reasonable expectation that it would provide a smooth coating for comestibles.

Conclusion

36. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nikki H. Dees whose telephone number is (571) 270-

3435. The examiner can normally be reached on Monday-Friday 7:30-5:00 EST
(second Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, D. Lawrence Tarazano can be reached on (571) 272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nikki H. Dees/
Examiner, Art Unit 1794
/Lien T Tran/
Primary Examiner, Art Unit 1794

Nikki H. Dees
Examiner
Art Unit 1794